

IN THE CLAIMS:

Please cancel claims 1-22.

Claims 1-22 (Canceled)

23. A method for extending the data retention of a ferroelectric field effect transistor (FET) exhibiting hysteresis, having source, drain, gate and substrate terminals, the method comprising:

determining the state of polarization of the ferroelectric FET before the FET is powered down;

injecting charge into the FET to produce a first threshold voltage if a first polarization state is determined;

removing charge from the FET to produce a second threshold voltage if second polarization state is determined;

determining the state of charge injection when the FET is powered up;

polarizing the FET to first polarization state if a first threshold voltage is determined; and

polarizing the FET to second polarization state if a second threshold voltage is determined.

24. The method of claim 23 wherein injecting charge comprises utilizing mechanisms selected from a group consisting of tunneling, Fowler-Nordheim tunneling, hot carrier injection, avalanche breakdown, and impact ionization.

25. The method of claim 23 wherein injecting charge comprises injecting charge into the dielectric layer in the drain region.

26. The method of claim 23 further comprising operating the FET so that the injected charge is determined by passing current through the FET with source and drain reversed, and wherein a high current represents a first data state and a lower current represents a second data state.

27. The method of claim 23 further comprising eliminating the threshold offset produced by the injected charge.